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[54] **HINGED STRUCTURE AND METHOD OF INTEGRATION IN A STANDARD SKI CONSTRUCTION**

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[*] Notice: The portion of the term of this patent subsequent to Nov. 1, 2005 has been disclaimed.

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Related U.S. Application Data

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[52] U.S. Cl. **16/323**; 16/324; 16/343; 16/349; 16/359; 16/369; 16/379; 16/387

[58] Field of Search 16/231, 288, 291, 292, 16/294, 297, 302, 321, 343, 349, 352, 358, 359, 360, 361, 368, 369, 370, 371, 375, 378, 379, 384, 387; 280/603

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[57] **ABSTRACT**

A hinged structure comprises a forward body and a rear body each having a surface face and a channel. A first hinge link and a second hinge link are employed to pivotably and slideably connect the forward body and the rear body and to provide movement of the bodies between an open position and a closed position. The first hinge link has a fixed end pivotably affixed to the forward body and a sliding end pivotably and slideably affixed to the rear body. The second hinge link has a fixed end pivotably affixed to the rear body and a sliding end pivotably and slideably affixed to the forward body. The sliding ends of the hinge links are pivotably and slideably affixed to their respective bodies by a pin engaging a hinge slide fitted within the channel of the respective body. Means can be used to secure the rear body to the forward body when the hinge is in the closed position. The hinge structure is integrated into a standard ski construction by mechanically fastening a shear plate to the forward and rear bodies, and integrally laminating the shear plates to the ski.

39 Claims, 7 Drawing Sheets